



# EU MISSIONS

## SOIL DEAL FOR EUROPE

October 2025

## Cluster on data and knowledge management

### WHY A DATA AND KNOWLEDGE MANAGEMENT CLUSTER?

The **data and knowledge management cluster** brings together Mission Soil projects working on one of the most foundational – and cross-cutting – aspects of the Mission Soil: how to organise, structure, store, share, and access the wealth of data and knowledge being produced.

Its main purpose is to help projects make their outputs **FAIR – Findable, Accessible, Interoperable, and Reusable** – ensuring that the results of individual projects can be discovered, connected, and reused by others, both within and beyond the Mission Soil community.

By creating a common space for exchange, the cluster **enables collaboration, alignment, and mutual learning** among data managers and technical partners who face similar challenges when dealing with managing datasets, models, maps, tools, or reports. It helps to translate the principles of open science into practical **guidance and shared practices**, promoting consistency and efficiency across projects.

The cluster's added value lies in building a **community of practice** around data and knowledge management. Through this collaboration, projects not only improve their own data workflows but also contribute to the development of a coherent European soil data ecosystem, in close connection with the **European Soil Observatory (EUSO)**.



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## HOW DO WE WORK?

The cluster is chaired by the Mission Soil project, **SoilWise**, acting as Cluster Adviser, co-steered by the Joint Research Centre (**JRC**), with support from the **Mission Soil Platform**, which facilitates meetings, manages communications, and ensures a regular exchange of practices and insights. The [Directorate-General for Agriculture and Rural Development \(DG AGRI\)](#) and the [European Research Executive Agency \(REA\)](#) provide strategic input to ensure alignment with evolving EU-level priorities.

The cluster brings together **representatives from all Mission Soil-funded projects**, specifically gathering **data managers and technical partners** dealing with data and knowledge requirements, alongside other Horizon-funded projects on the topic of soil. Regular meetings gather 40-60 participants and are structured to promote both peer exchange and expert input, including hands-on sessions on topics such as metadata, FAIR data, cataloguing, soil knowledge, and best data management practices. Recurring discussions focus on practical challenges such as repositories, licensing, GDPR and data sensitivity, metadata standards, and the integration of knowledge outputs beyond datasets.

## MAIN ACHIEVEMENTS SO FAR

Since its launch in early 2024, the **data and knowledge management cluster** has evolved into an active community connecting more than **60 Mission Soil projects**, with a constant turnout of participants representing these projects at each meeting. Most meetings during 2024 were held **virtually**, providing a regular space for exchange and coordination among projects. The exception was the **in-person meeting in Brussels in November 2024**, organised immediately after the Mission Soil Week, which featured a **full day of presentations, workshops, and interactive sessions**. This event marked a turning point in the cluster's work, fostering direct collaboration, hands-on learning, and community building around FAIR data and knowledge management within the Mission Soil programme.

Over the first year of activity, the cluster has achieved several tangible results.

**Building a common foundation:** Established a shared understanding of FAIR principles, open access obligations, and repository use under Horizon Europe. The **metadata template** was continuously discussed throughout the year and explained in detail during the **Brussels meeting**, where participants provided feedback and jointly explored how it supports the use of the **Dublin Core standard** as the minimum metadata profile for Mission Soil projects. This work was carried out in close coordination with the **JRC**, with strategic input from **DG AGRI** and **REA**, ensuring that the approach aligns with the evolving requirements of the EUSO and the Mission Soil Strategy.

**Advancing the SoilWise Metadata Catalogue:** The catalogue evolved from concept to a functional prototype, now harvesting tens of thousands of metadata records from repositories such as CORDIS, Zenodo, and others. Collaboration with projects such as **ISLANDR** and **SOLO** demonstrated practical integration and validation of project metadata.

**Showcasing and exchanging beyond the cluster:** Several Mission Soil projects engaged with the **SoilWise Catalogue** during events and meetings, fostering active exchange both **within and outside the cluster**. These demonstrations highlighted the added value of harmonised metadata and encouraged wider participation in testing and co-development.

**Strengthening collaboration and capacity:** By establishing a peer community of data and knowledge managers, the cluster has created a shared platform for dialogue, problem-solving, and mutual support, paving the way for greater alignment across the Mission Soil portfolio.

Together, these activities have laid the groundwork for harmonised data and knowledge management across the Mission Soil projects and for closer integration with the **EUSO**.

# CLUSTER ACTIVITIES IN 2025

## VIRTUAL MEETING – SEPTEMBER 2025

The first cluster meeting of 2025 took place online in September and focused on catching up with ongoing **SoilWise Catalogue** developments, exchanging updates, and preparing the ground for the next in-person workshop.

The session combined short project updates with an **open discussion**. The interactive exchange gathered feedback on how partners are using the catalogue, confirmed its value in improving **findability and visibility** of project results, and helped identify training needs on **FAIR data, metadata use, and knowledge integration**.

The meeting also introduced the **knowledge concept**, explained through concrete examples, and included a **practical showcase** on how to best populate the **SoilWise Catalogue**, and later the **EUSO**, with data and knowledge results. This topic will be further developed and followed up in the upcoming in-person meeting later this year.

The **SoilWise team** presented a **screening form** to help projects list existing and planned outputs, hosting locations or DOIs (digital object identifier), and licensing arrangements. This tool will support a more systematic inclusion of project resources in the catalogue and foster collaboration and capacity building across the Mission Soil community.

## OUTLOOK TOWARDS THE IN-PERSON BRUSSELS MEETING, DECEMBER 2025

The **in-person cluster meeting** scheduled for **2 December 2025 in Brussels** will be a **full-day working event** focused on active participation rather than presentations. Instead of slide decks, the day will centre on **collaborative group work, workshops, and open exchange** among Mission Soil projects.

Discussions and activities will address several key themes, including:

- an **applied discussion on the metadata template** – what works, what doesn't, and how to continue its co-development together with the projects;
- a **follow-up on the knowledge discussion** from the September meeting, exploring how different knowledge types can be represented and shared;
- **best practices and guidance materials** being developed by SoilWise to support both data and knowledge providers;
- the use of existing vocabularies and terminology frameworks such as **GEMET<sup>1</sup>**, **AGROVOC<sup>2</sup>**, and **GLOSIS<sup>3</sup>**, with recommendations to reference existing terms where possible and avoid creating new ones;
- **live testing sessions** of the **SoilWise Catalogue**, allowing participants to explore functionalities, provide feedback, and co-develop the platform.

This hands-on session aims to strengthen alignment, promote peer learning, and ensure that the cluster's outputs are directly informed by user experience – an important step towards integrating Mission Soil project results into the **EUSO**.

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1 General Multilingual Environmental Thesaurus

2 AGROVOC is a multilingual and controlled vocabulary designed to cover concepts and terminology under FAO's areas of interest.

3 Global Soil Information System

## CONTACT / LEARN MORE

### FOR MORE INFORMATION:

- > Visit the [SoilWise project website](#) for FAQs and further resources.
- > Contact SoilWise at [soilwise@biosense.rs](mailto:soilwise@biosense.rs) for guidance or to volunteer for testing.
- > Updates on the cluster's activities are also shared through the **Mission Soil Platform** and the **European Commission's Mission Soil communication channels**.



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